WE CLAIM:

1. A transparent, biaxially oriented and heat-set film having one or more layers and comprising, as main constituent, at least one crystallizable thermoplastic, wherein the film comprises at least one hydrolysis stabilizer.

2. The film as claimed in claim 1, wherein the hydrolysis stabilizer is a phenolic compound.

3. The film as claimed in claim 2, wherein the phenolic compound is a sterically hindered phenol, thiobisphenol, alkylidenebisphenol, or alkylphenol, or a hydroxybenzyl compound, or an acylaminophenol and/or a hydroxyphenyl propionate.

4. The film as claimed in claim 2, wherein the proportion of the phenolic compound is from 0.1 to 8.0% by weight based on the weight of the film or, respectively, of the layer provided therewith within the film having more than one layer.

5. The film as claimed in claim 2, wherein the phenolic compound has been combined with at least one organic phosphite.

6. The film as claimed in claim 5, wherein the ratio by weight of the phenolic compound to the organic phosphite is from 10 : 90 to 90 : 10.

7. The film as claimed in claim 1, wherein the hydrolysis stabilizer is selected from the group consisting of monomeric and polymeric carbodiimides and oxazolines.

8. The film as claimed in claim 7, wherein the polymeric carbodiimide has a molecular weight of from 2 000 to 50 000.

9. The film as claimed in claim 7, wherein the proportion of the monomeric or polymeric carbodiimide, and/or of the oxazoline, is from 0.1 to 5.0% by weight based on the weight of the single-layer film or, respectively, of the layer provided therewith within the film having more than one layer.

10. The film as claimed in claim 1, wherein the hydrolysis stabilizer is a mixture made from 0.1 to 5% by weight of polymeric aromatic carbodiimides and 0.1 to 5% by weight of a blend made from 30 to 90% by weight of an organic phosphite and 70 to 10% by weight of a hydroxyphenyl propionate.

11. The film as claimed claim 1, wherein the proportion of all of the hydrolysis stabilizers together is from 0.2 to 16.0% by weight based on the weight of the film or, respectively, of the relevant layer within the film having more than one layer.

12. The film as claimed in claim 1, which has been made UV-resistant, or flame-retardant, or on one side or on both sides has been coated, or is sealable, and/or has been corona- or flame-treated.

13. The film as claimed in claim 12, wherein the film, or at least one layer thereof, comprises a UV stabilizer.

14. The film as claimed in claim 13, wherein the UV stabilizer is 2-(4,6-diphenyl-[1,3,5]-triazin-2-yl)-5-hexyloxyphenol, 2,2′-methylenebis[6-benzotriazol-2-yl-4-(1,1,2,2-tetramethylpropyl)phenol] or 2,2′-(1,4-phenylene)bis[[3,1]benzoxazin-4-one].

15. The film as claimed in claim 13, wherein the proportion of the UV stabilizer is from 0.1 to 5.0% by weight based on the total weight of the at least one layer.

16. The film as claimed in claim 12, wherein the film, or at least one layer thereof, comprises a flame retardant.

17. The film as claimed in claim 16, wherein the flame retardant is a bromine compound, a chloroparaffin, or another chlorine compound, antimony trioxide, aluminum hydroxide, or an organic phosphorus compound.

18. The film as claimed in claim 16, wherein the proportion of the flame retardant is from 0.5 to 30.0% by weight based on the weight of the layer of the crystallizable thermoplastic.

19. The film as claimed in claim 12, which additionally encompasses a sealable outer layer.

20. The film as claimed in claim 1, wherein the longitudinal and transverse shrinkage of the film after 15 minutes of heating to 150°C are each less than 1.5%, preferably less than 1.3%.

21. A process for producing the film as claimed in claim 1, wherein a mixture which encompasses at least one crystallizable thermoplastic as main constituent and encompasses at least one hydrolysis stabilizer is melted in an extruder and shaped by extrusion or coextrusion to give a film having one or more layers, where the at least one hydrolysis stabilizer is added, prior to extrusion or coextrusion, in the form of a precrystallized or predried masterbatch.

22. The process as claimed in claim 21, wherein the substantively amorphous prefilm formed during extrusion is quenched on a chill roll, then reheated, oriented longitudinally and/or transversely, and finally heat-set.